

Is Our Garbage Trashing the Climate?

Some benefits of reducing waste and recycling are obvious. For example, less material sent to the landfill means less land sacrificed to bury our garbage. But cutting down on waste also reduces “greenhouse gases”—the stuff that warms our atmosphere, makes glaciers melt and contributes to extreme weather conditions.

How so? Take soda cans: to produce aluminum, bauxite ore has to be extracted from the Earth, transported and processed. This requires large amounts of energy—the equivalent of some 1,740 gallons of gasoline for every ton of aluminum. When gasoline or other fuels are burned, carbon dioxide—the most common greenhouse gas—is released into the atmosphere. In contrast, making one ton of aluminum from *recycled* material uses only the equivalent of about 90 gallons of gasoline. That’s an obvious score for the climate.

But wait - there are more reasons why keeping stuff out of the landfill is good for the climate. Landfills themselves actually *generate* greenhouse gases. Organic materials, such as paper and food scraps, cannot decompose the same way they would in a compost pile, because there is no air inside the landfill. Instead, they break down slowly emitting methane, a gas with 23 times the global warming potential of carbon dioxide. According to the Tellus Institute, almost 90% of Massachusetts garbage consist of mixed paper, cardboard, food waste, agricultural waste and other organic materials that could be composted or recycled.

Speaking of paper recycling, the more paper we all recycle and the more recycled paper products we purchase, the fewer trees need to be cut down. Instead, these trees could continue to do what all plants do: absorb carbon dioxide from the atmosphere and turn it into oxygen, a naturally “climate cooling” process. Of course, making new goods from recycled materials still requires some energy and creates some greenhouse gases. That’s why it is best for the climate (and our wallets too!) to consider a used product, or to find an alternative such as renting, before we buy new.

Being a good steward to the environment and practicing the 3R’s (reduce, reuse, recycle) has always been preferable to landfilling or incineration. But in light of the global threat of climate change, it is more important than ever that we use our resources wisely.

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